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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,596	11/21/2003	Ayae Endo	117625	8683
25944	7590	05/26/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			GARRETT, DAWN L	
			ART UNIT	PAPER NUMBER

1774

DATE MAILED: 05/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/717,596	ENDO ET AL.	
	Examiner	Art Unit	
	Dawn Garrett	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10,18-21,27-29,34,37 and 38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10,18-21,27-29,34,37 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1-31-2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 28, 2006 has been entered.
2. Claims 1, 18, 19, 27, and 29 were amended. Claims 11-17, 22-26, 30-33 35 and 36 are canceled. Claims 1-10, 18-21, 27-29, 34, 37 and 38 are pending.
3. The rejection of claims 1-6, 8-10, 18-21, 27-29, 34, 37 and 38 under 35 U.S.C. 102(e) as being anticipated by Li (US 6,372,154) is withdrawn due to the amendment.
4. The rejection of claims 1-10, 18-21, 27-29, 34, 37 and 38 under 35 U.S.C. 102(e) as being anticipated by Lamansky et al. (US 2004/0062947) is withdrawn due to the amendment.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-10, 18-21, 27-29, 34, 37, and 38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. While the specification provides support for a metal

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deactivator in a range of 0.1 to 10 percent by weight relative to a hole injection or luminescent layer, it is not seen where the specification provides support for this weight range relative to “a functional element”. Accordingly, the new limitation comprising the percent by weight relative to a functional element is considered to be new matter.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-10, 27-29, 34, and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Independent claims 1, 27, and 29 set forth a weight range relative to a functional element. Since a functional element is not expressly set forth previously in the claim, the “functional element” is considered to be indefinite. It is not clear if the functional element is something already recited in the claim or if it is a separate component. The amount of metal activator is unclear since the “functional element” limitation is undefined.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 2, 4, 5, 8, 9, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Cantor (US 6,080,450). Cantor discloses a composition comprising 0.1 % Irganox MD 1024, which is the same metal deactivator set forth in the present specification and inherently has the

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same properties as the material disclosed by applicant (see Cantor, col. 5, "Formulation A").

The formulation comprises organic compounds per the organic functional material of claim 2.

An oligomer and acrylate are disclosed per the macromolecule of claim 4. Since claim 5 is drawn to a composition not an electroluminescent element, the organic compounds of the composition meet the claim limitation.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-6, 8-10, 18-21, 27-29, 34, 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li (US 6,372,154). Li discloses a luminescent ink composition comprising a luminescent organic compound ("solute"), an inert solvent ("solvent") and a functional additive ("metal deactivator") with regard to claim 1 (see claim 1, col. 15) that are used to form an electroluminescent device (see abstract). The organic luminescent molecule may be a macromolecule such as distyrylbenzene (see claim 3, col. 15) with regard to claim 4. Li discloses the functional additive ("metal deactivator") may comprise triazoles (see claim 9, col. 15). Triazoles are disclosed by applicant in par. 11 of the present specification as metal deactivators. Since Li discloses the same material, triazoles, as applicant, the materials are considered to have the same transparency and color properties as those claimed by applicant with regard to claims 8 and 9. Similarly, since the materials disclosed by Li are the same as those specified by applicant, the solubility properties of claim 10 are also deemed to be met in the

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disclosure by Li. With regard to claim 29, the devices comprise multiple layers (see col. 12, lines 62-67). Li teaches the functional additives (such as the triazoles) are added in an amount of 0.5-40 weight percent (see col. 2, lines 44-62). It would have been obvious to one of ordinary skill in the art at the time of the invention to have selected any triazole derivative, including those specifically mentioned in the present specification in the amount of 0.5-40 weight percent, because Li generally teaches triazoles are suitable as a functional additive for the device.

Response to Arguments

13. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached at (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Dawn Garrett
Primary Examiner
Art Unit 1774

D.G.
May 23, 2006